

## AMENDMENTS

Applicant requests that the Examiner enter the following amendments:

### IN THE CLAIMS:

1. (Currently amended) A method for detecting, inferring, or monitoring a neoplastic disease in a human, wherein said neoplastic disease is associated with expression or overexpression of one or more RNA species, the method comprising the steps of:
  - a) extracting total extracellular RNA from plasma or serum of a human;
  - b) amplifying or signal amplifying quantitatively or qualitatively a portion of the extracted RNA or cDNA therefrom to produce an amplified product or signal, using primers or probes specific for RNA or cDNA therefrom, wherein said RNA is expressed or overexpressed in a neoplastic disease;
  - c) detecting quantitatively or qualitatively the amplified product or signal and comparing the amplified product or signal to a reference determined from a human group or population,

wherein a neoplastic disease is detected, inferred or monitored in a human when the amplified product or signal of one or more RNA expressed or overexpressed in said neoplastic disease, or cDNA therefrom, is detected in an amount or concentration greater than ~~the a~~ reference amount or concentration for said RNA or cDNA therefrom determined from plasma or serum from a human group or population without said neoplastic disease, ~~and/or when the amplified product or signal of one or more RNA or cDNA therefrom is detected in an amount or concentration not less than the reference amount or concentration for said RNA or cDNA therefrom determined from a human group or population with said neoplastic disease.~~

2. (Previously presented) The method of claim 1, wherein the neoplastic disease is cancer or premalignancy.
3. (Withdrawn) The method of claim 1, wherein the amplified product is produced from a non-tumor related RNA or cDNA produced therefrom.
4. (Original) The method of claim 1, wherein the amplified product is produced from a tumor related RNA or cDNA produced therefrom.
5. (Currently amended) A method for detecting, inferring, or monitoring a neoplastic disease in a human, wherein said neoplastic disease is associated with the expression or overexpression of one or more RNA species, the method comprising the steps of:
  - a) extracting total RNA from a non-cellular fraction of blood from a human;
  - b) amplifying or signal amplifying quantitatively or qualitatively a portion of the extracted RNA or cDNA therefrom to produce an amplified product or signal, using primers or probes specific for RNA or cDNA therefrom, wherein said RNA is expressed or overexpressed in a neoplastic disease;
  - c) detecting quantitatively or qualitatively the amplified product or signal and comparing the amplified product or signal to a reference determined from a human group or population,

wherein a neoplastic disease is detected, inferred or monitored in a human when the amplified product or signal of one or more RNA expressed or overexpressed in said neoplastic disease, or cDNA therefrom, is detected in an amount or concentration greater than ~~the a~~ reference amount or concentration determined from a non-cellular fraction of blood from a human group or population without said neoplastic disease, ~~and/or when the amplified product or signal of one or~~

more RNA or cDNA therefrom is detected in an amount or concentration not less than the reference amount or concentration determined from a human group or population with said neoplastic disease.

6. (Previously presented) The method of claim 5, wherein the neoplastic disease is cancer or premalignancy.
7. (Withdrawn) The method of claim 5, wherein the amplified product is produced from a non-tumor related RNA or cDNA produced therefrom.
8. (Original) The method of claim 5, wherein the amplified product is produced from a tumor related RNA or cDNA produced therefrom.
9. (Currently amended) A method to detect, infer, or monitor a neoplastic disease in a human, wherein the neoplastic disease is associated with the expression or overexpression of one or more tumor-associated human RNA species, the method comprising the steps of determining an amount or concentration or comparative value of ~~total extracellular RNA~~ or one or a plurality of [a] tumor associated human RNA species associated with said neoplastic disease in a portion of plasma or serum from the human, and comparing the amount or con/cetration or comparative value of ~~total extracellular RNA~~ or one or a plurality of [a] tumor associated human RNA species from plasma or serum of said human to a reference range RNA amount, concentration, or value determined from a defined human group or population without neoplastic disease, wherein a neoplastic disease is detected, inferred, or monitored in a human when the amount or concentration or comparative value of ~~total extracellular RNA~~ or one or a

plurality of said tumor-associated human RNA in said human is greater than a defined reference range RNA amount, concentration, or value for said tumor-associated RNA determined from plasma or serum from a human group or population without a neoplastic disease, ~~and/or when the amount or concentration or comparative value of total extracellular RNA or one or a plurality of tumor-associated RNA in said human is not less than a reference range RNA amount, concentration, or value determined from a human group or population with a neoplastic disease.~~

10. (Withdrawn) The method of claim 9, wherein the defined group or population comprises healthy humans.
11. (Withdrawn) The method of claim 9, wherein the defined group or population comprises healthy animals.
12. (Previously presented) The method of claim 9, wherein the group or population with a neoplastic disease comprises humans with cancer.
13. (Cancelled)
14. (Previously presented) The method of claim 9, wherein the group or population with a neoplastic disease comprises humans with premalignancy.
15. (Cancelled)
16. (Previously presented) The method of claim 12, wherein the group or population comprises humans of a specific cancer type or stage.
17. (Original) The method of claim 9, wherein the defined group or population comprises humans of a specific gender or age group.

18. (Original) The method of claim 9, wherein the defined group or population comprises humans who smoke.
19. (Withdrawn) The method of claim 9, wherein the defined group or population comprises humans with a family or genetic history of cancer or cancer risk.
20. (Currently amended) A method to detect, infer, or monitor neoplastic disease in a human, wherein the neoplastic disease is associated with the expression or overexpression of one or more tumor-associated human RNA species, the method comprising the steps of determining an amount or concentration or comparative value of ~~total extracellular RNA or one or a plurality of tumor-associated human RNA species~~ associated with said neoplastic disease in a portion of a non-cellular fraction of blood from the human, and comparing to a reference range RNA amount, concentration, or value determined from a defined human group or population without neoplastic disease, wherein a neoplastic disease is detected, inferred, or monitored in a human when the amount or concentration or comparative value of ~~total extracellular RNA or one or a plurality of said tumor-associated human RNA~~ in said human is greater than a defined reference range RNA amount, concentration, or value for said tumor-associated RNA determined from plasma or serum from a human group or population without neoplastic disease, ~~and/or when the amount or concentration or comparative value of total extracellular RNA or one or a plurality of tumor-associated RNA in said human is not less than a reference range RNA amount, concentration, or value determined from a human group or population with a neoplastic disease.~~

21. (Withdrawn) The method of claim 20, wherein the defined group or population comprises healthy humans.
22. (Withdrawn) The method of claim 20, wherein the defined group or population comprises healthy animals.
23. (Previously presented) The method of claim 20, wherein the group or population with a neoplastic disease comprises humans with cancer.
24. (Cancelled)
25. (Previously presented) The method of claim 20, wherein the group or population with a neoplastic disease comprises humans with premalignancy.
26. (Cancelled)
27. (Previously presented) The method of claim 23, wherein the group or population comprises humans of a specific cancer type or stage.
28. (Original) The method of claim 20, wherein the defined group or population comprises humans of a specific sex or age group.
29. (Original) The method of claim 20, wherein the defined group or population comprises humans who smoke.
30. (Withdrawn) The method of claim 20, wherein the defined group or population comprises humans with a family or genetic history of cancer or cancer risk.
31. (Currently amended) A method of comparing an amount or concentration of a housekeeping gene RNA from blood plasma or serum to an amount or concentration of a tumor-associated RNA from blood plasma or serum of a human, evaluating a human for a neoplastic disease the method comprising the steps of extracting RNA from blood plasma

~~or serum of a human, assaying quantitatively blood plasma or serum a portion of the extracted RNA from the human to determine an amount or concentration of a housekeeping gene RNA and an amount or concentration of a tumor-associated RNA, whereby determination of and comparing the amount or concentration of [a] the housekeeping gene RNA and the tumor-associated RNA thereby in the presence or absence of tumor-associated RNA in blood plasma or serum from said human thereby evaluates a human for a neoplastic disease.~~

32. (Currently amended) A method of comparing an amount or concentration of a housekeeping gene RNA from a non-cellular fraction of blood to an amount or concentration of a tumor-associated RNA from a non-cellular fraction of blood of a human, evaluating a human for a neoplastic disease the method comprising the steps of extracting RNA from a non-cellular fraction of blood of a human, assaying quantitatively non-cellular fraction of blood from the human a portion of the extracted RNA to determine an amount or concentration of a housekeeping gene RNA and an amount or concentration of a tumor-associated RNA, whereby determination of and comparing the amount or concentration of [a] the housekeeping gene RNA and the tumor-associated RNA thereby in the presence or absence of tumor-associated RNA in blood plasma or serum from said human thereby evaluates a human for a neoplastic disease.
33. (Withdrawn) A method of evaluating a human or animal for a disease comprising the step of assaying quantitatively blood plasma or serum from the human or animal to determine an amount or concentration of a non-tumor related RNA.

34. (Withdrawn) A method of evaluating a human or animal for a disease comprising the step of assaying quantitatively non-cellular fraction of a bodily fluid from the human or animal to determine an amount or concentration of a non-tumor related RNA.
35. (Cancelled)
36. (Cancelled)
37. (Cancelled)
38. (Cancelled)
39. (Cancelled)
40. (Cancelled)
41. (Cancelled)
42. (Cancelled)
43. (Cancelled)
44. (Cancelled)
45. (Previously presented) The method of claim 9, wherein the neoplastic disease is cancer or premalignancy.
46. (Previously presented) The method of claim 20, wherein the neoplastic disease is cancer or premalignancy.
47. (Cancelled)
48. (Cancelled)
49. (Withdrawn) The method of claim 33, wherein the disease is cancer or premalignancy.
50. (Withdrawn) The method of claim 34, wherein the disease is cancer or premalignancy.